

INTERNATIONAL SEARCH REPORT

International application No.

PCT/FI 2003/000835

A. CLASSIFICATION OF SUBJECT MATTER

IPC7: F16B 31/02, F16L 47/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: F16B, F16L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,N0 classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-INTERNAL, WPI DATA, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 6322108 B1 (RIESELMAAN ET AL), 27 November 2001 (27.11.2001), whole document --	1-7
Y	US 4790573 A (CARDOZO), 13 December 1988 (13.12.1988), detail 2 --	1-7
Y	PATENT ABSTRACT OF JAPAN vol. 1998, no. 01, 30 January 1998 (1998-01-30) & JP 9242729 A (NIFCO INC), 16 September 1997 (1997-09-16) detail 22 --	1-7

☒ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

27 January 2004

Date of mailing of the international search report

03-02-2004

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	<p>GB 2327107 A (QED INTELLECTUAL PROPERTY LIMITED), 13 January 1999 (13.01.1999), whole document</p> <p style="text-align: center;">-- -----</p>	1-7

INTERNATIONAL SEARCH REPORT

Information on patent family members

24/12/2003

International application No.

PCT/FI 2003/000835

US	6322108	B1	27/11/2001	AT	233385	T	15/03/2003
				DE	19841801	C	04/05/2000
				EP	0985866	A,B	15/03/2000

US	4790573	A	13/12/1988	BR	8603153	A	08/03/1988
				DE	3721577	A,C	21/01/1988

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				GB	9714136	D	00/00/0000
				WO	9902870	A	21/01/1999
